REMARKS

Claims 1, 7, and 9-17 are the only active claims pending in this application. Claims 2-6 and 8 are canceled. The foregoing separate sheets marked as "Listing of Claims" show all the claims in the application, each with an indication at its first line showing the claim's current status.

I.   Claim Rejections – 35 U.S.C. § 112, second paragraph

The Office Action rejects claims 6, 7 and 16 as indefinite under 35 U.S.C. § 112, second paragraph, citing the language: "the communication extent ... for each location" is indefinite. Office Action at p. 3. Applicant respectfully responds that claims 6 and 7 are canceled, and claim 16 is amended to more clearly recite the context of the phrase: "communication extent." Applicant respectfully submits that, reading the amended claim in view of the original disclosure, the phrase "communication extent" clearly means, and would be understood by a person skilled in the art to clearly mean, the quantity of communication between the terminal and the internet.

The Office Action rejects claims 8-13 as indefinite under 35 U.S.C. § 112, second paragraph, citing as basis the claims' recitation of "each wireless terminal is also wireless LAN connected to the wireless base station ... than the own location." Office Action at p. 3. Claim 8 is canceled for purposes of expediting this application.

With respect to claims 9-13, Applicant respectively responds that the subject phrase "terminal is wireless LAN connected" means: the terminal is wirelessly connected to, for example, the wireless base station through a LAN-type wireless connection. Respectfully referring the Examiner to Fig. 8, as an example, the wireless terminal 11B is shown as "wireless LAN connected" to the wireless LAN base station 12A. Likewise, referring to Fig. 11, the wireless terminal 11A "wireless LAN connected" to the wireless LAN base station 12A, while the wireless terminal 11B is "wireless LAN

connected" to the wireless LAN base station 12B *and* is "wireless LAN connected" to the wireless LAN base station 12A.

For the reasons presented above, Applicant respectfully requests these rejections under 35 U.S.C. § 112, second paragraph, be reconsidered and withdrawn.

II.   Claim Rejections on Prior Art

The Office Action rejects claims 1-2 and 14-16 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Publication No. 2003/0200439 ("Moscowitz"). Office Action at pp. 4-7. Applicant respectfully traverses the rejection. Applicant respectfully submits Moscowitz is not material to base claims 1 and 2. Claim 2 is canceled for purposes of expediting this application, without disclaimer of subject matter. Regarding claim 1, Applicant has amended the claim for clarity and, without waiver of the traversal or disclaimer of any subject matter, and references the amended language to show Moscowitz is not material to the claimed subject matter.

Applicant's claim 1 defines a combination having a user terminal in each of a plurality of locations, each terminal generating communications having a unique location identifier, and a gateway that connects the terminals to the internet. The gateway is arranged to record a communication band usage data, reflecting each terminal's communication with the internet. The gateway is further arranged to generate a communication fee data, for each terminal, based on a ratio of the terminal's communication band usage data and the total communication band usage data for all of the terminals. In other words, a fee is generated for each terminal based on the ratio of that terminal's internet communication through the gateway to the total of all of the terminals' communication through the gateway.

Moscowitz, to the extent, if any, its detail is sufficient to qualify its description as a disclosure to a person of ordinary skill in the art, appears to identify a packet-based billing system having an objective of routing packets using what appears to be modified TCP/IP protocol that inserts a watermark in packets, and then prioritizes the packet transmission through the internet based on a level of bandwidth right paid (or prepaid) by the owner of the watermark.

Moscowitz discloses nothing of, or capable of performing, and suggests nothing toward a calculation or other determination of a usage fee data for each of a plurality of terminals, based on a ratio of the terminal's communication band usage to a total of other terminals' communication band usage in connecting, through anything, much less through a gateway.

Applicant respectfully submits that re-arranging and otherwise modifying Moscowitz to have such a feature would fundamentally change Moscowitz's described principle of operation, and would render it unfit for its apparent intended purpose. Moscowitz's principle of operation, to the extent its disclosure describes, is to sell packet priority rights, assign purchasers of the rights different watermarks, inspect each packet's watermark as it flows through the internet, and then rout the packet according to the priority reflected by the watermark. The purpose is to allow users to pre-pay for any quality of service (QoS) the user desires.

Modifying Moscowitz to calculate or determine a usage fee data for each of a plurality of terminals, based on a ratio of the terminal's communication band usage to a total of other terminals' communication band usage, in any manner, much less in connecting through a gateway to the internet would fundamentally change Moscowitz's principle of operation and, by charging based on proportional use, it would no longer prioritize based on a guaranteed QoS – rendering it unfit for its intended purpose.

Applicant respectfully submits that, for at least the foregoing reasons, Moscowitz does not show obviousness of Applicant's claim 1 under 35 U.S.C. § 103(a). Applicant therefore respectfully requests this rejection be reconsidered and withdrawn.

Claims 14-16 depend from claim 1 and, therefore, are patentable over Moscowitz for at least the reasons presented above.

The Office Action rejects claims 3-13 and 17 under 35 U.S.C. § 103(a) as being unpatentable over Moscowitz in view of statements of what Examiner identifies as "what was well known in the art," in further view of U.S. Patent No. 5,987,430 ("Van Horne"). Office Action at pp. 7-21.

Claims 3-6 and 8 are canceled for purposes of expediting this application, without disclaimer of subject matter.

Claim 17 depends from claim 1, and Applicant respectfully submits the difference between base claim 1 and the combination of prior art on which claim 17 is rejected is not less than the difference between base claim 1 and Moscowitz standing alone. Van Horne teaches billing based on connection time. Van Horne teaches *nothing* of, or capable of billing each terminal based on a *ratio of the terminal's usage to the total usage by other of a plurality terminals.*

Regarding claims 7 and 9-13, Applicant has amended the claims for clarity and, without waiver of the traversal or disclaimer of any subject matter, and references the amended language to show Moscowitz is not material.

Claim 7 defines a combination having Applicant's claim 1 defines a combination having a plurality of gateways, each gateway having an access line to the internet, and a user terminal in each of a plurality of locations, arranged to generate communications having a unique location identifier. The claimed gateways are further arranged to compare the communication usage load on each of the access lines, and to selectively connect the

usage load on each of the access lines, and to selectively connect the terminals to the internet through the access line having the lower load. The claimed combination further includes a charging server, the charging server arranged to record a communication band usage data, reflecting each terminal's communication with the internet, and arranged to generate a communication fee data, for each terminal, based on a ratio of the terminal's communication band usage data and the total communication band usage data for all of the terminals.

As Applicant submits above, Moscowitz appears to identify a packet-based billing system having an objective of routing packets using what appears to be modified TCP/IP protocol that inserts a watermark in packets, and then prioritizes the packet transmission through the internet based on a level of bandwidth right paid (or prepaid) by the owner of the watermark.

Moscowitz teaches nothing of a plurality of terminals, connected to a plurality of gateways, the gateways having respective access lines.

Moscowitz does not disclose, teach or suggest anything toward a plurality of gateways arranged to compare the communication load on each of the access lines and to connect the terminals to the access line having the lower load.

The Examiner's position is that Moscowitz, at paragraph no. 78, teaches "bandwidth can be re-allocated to a user in demand or may be dynamically adjusted." Office Action at p. 12.

Applicant respectfully responds that Moscowitz does not disclose the subject matter that the Examiner identifies. Moscowitz is describing market forces, i.e., users trading, purchasing and selling bandwidth rights as a liquid asset, based on supply and demand. Moscowitz uses the term "bandwidth provisioning" to refer to a marketplace, or commodity exchange, for buying and selling the bandwidth rights, i.e., the packet routing premium and its

representative watermark. This has nothing to with, and suggests nothing toward Applicant's claim 7.

Moscowitz does not disclose, teach or suggest anything toward a charging server, or of anything else, arranged to calculate or determine a usage fee data for each of a plurality of terminals, based on a ratio of the terminal's communication band usage in connecting through a gateway (or through anything else) to a total of other terminals' communication band usage in connecting through the gateway (or anything else).

As Applicant submits above with respect to claim 1, Moscowitz's principle of operation is to sell packet priority rights, assign purchasers of the rights different watermarks, inspect each packet's watermark as it flows through the internet, and then rout the packet according to the priority reflected by the watermark. The purpose is to allow users to pre-pay for any quality of service (QoS) the user desires. As Applicant also submits, re-arranging and otherwise modifying Moscowitz to charge a terminal an access fee based on a ratio of that terminal's use to other terminals' use feature would fundamentally change this described principle of operation, and would render Moscowitz unfit for its apparent intended purpose.

Applicant respectfully submits that Van Horne, which teaches only a connection-time charge, adds nothing to Moscowitz having anything to do with any of the claim 7 elements Moscowitz lacks.

Applicant respectfully submits that, for at least the foregoing reasons, the combination of Moscowitz, Van Horne and knowledge in the art does not show obviousness of Applicant's claim 7 under 35 U.S.C. § 103(a). Applicant therefore respectfully requests that the rejection be reconsidered and withdrawn.

Applicant's claim 9 defines, with variation in language and scope, a system comparable to that defined by claim 1. Van Horne teaches only a connection-time charge, adds nothing to Moscowitz having anything to do

with any of the claim 1 elements Moscowitz lacks. Applicant therefore respectfully submits that, for the reasons Applicant presents with respect to claim 1, Moscowitz, Van Horne and knowledge in the art does not show obviousness of Applicant's claim 9 under 35 U.S.C. § 103(a). Applicant therefore respectfully requests that the rejection of claim 9 be reconsidered and withdrawn.

Applicants claim 10 defines a combination of a plurality of wireless LAN base stations in a plurality of locations and at least one wireless LAN terminal in each of the locations. The claim defines each of the wireless LAN terminals wireless connected to a plurality of the wireless LAN base stations, at least one of the plurality being in the same location as the terminal and at least one other of the plurality being in a different location. The claim 10 combination further includes a common gateway connecting the wireless LAN base stations to the internet. Applicant respectfully refers the Examiner to Applicant's Fig. 11 as an illustration of one example of this claim 11 recital. Referring to Fig. 11, wireless terminal 11A is wireless connected to the wireless LAN base station 12A, which is in the same location as the terminal 11A, and is connected to wireless LAN base station 12B, which is in a different location. With continuing reference to Fig. 11, example common gateway 21 connects the wireless LAN base stations 12A and 12B to the internet.

Applicant's claim 10 further defines the wireless LAN base stations, wireless terminals and gateway arranged to measure a communication speed from each of the wireless LAN terminals to the internet through each of the wireless LAN base stations, and to compare the measured speed, and to selectively connect each of wireless terminals to the internet using the wireless LAN base station having the highest measured speed among the plurality of base stations to which it is connected.

Moscowitz does not teach or disclose anything meeting, or capable of meeting claim 10, and does not suggest anything toward the claim.

Moscowitz appears to identify a packet-based billing system having an objective of routing packets using what appears to be modified TCP/IP protocol that inserts a watermark in packets, and then prioritizes the packet transmission through the internet based on a level of bandwidth right paid (or prepaid) by the owner of the watermark.

Moscowitz teaches nothing of the claim 10 combination and arrangement of a plurality of wireless LAN base stations, wireless LAN terminals and common gateway.

Moscowitz teaches nothing of the claim 10 combination and arrangement of each wireless LAN terminal wireless connected to a plurality of the wireless LAN base stations, at least one in the same location as the terminal and at least one in a different location.

Moscowitz does not disclose, teach or suggest anything of, or toward a plurality of gateways arranged to compare the communication speed from the different terminals, through anything, much less through the different wireless LAN base stations to which the terminals are connected.

Moscowitz does not disclose, teach or suggest anything of, or toward a plurality of gateways arranged to selectively connect each of a plurality of terminals to the internet, based on a speed measurement, through the wireless LAN base station having the highest speed among the base stations to which the terminal is connected.

Van Horne teaches time-based connection billing, which has nothing to with these elements of claim 10 Moscowitz lacks.

The Examiner's position is that Van Horne's at column 7, lines 40-50 is a teaching of the claim 10 speed measurements and selectively connecting the terminals to the internet through the highest speed base station from among

the different base stations to which the terminals are connected, based on comparing the speed measurement. Office Action at pp. 16-17.

Applicant respectfully submits that the cited passage of Van Horne merely identifies optional interfaces that can be used to implement a system. Van Horne does not disclose the claim 10 arrangement for speed measurements, comparing, and selective connecting through the wireless LAN base station having the highest measured speed.

Applicant respectfully submits that, for at least the foregoing reasons, the combination of Moscowitz, Van Horne and knowledge in the art does not show obviousness of Applicant's claim 10 under 35 U.S.C. § 103(a). Applicant therefore respectfully requests that the rejection be reconsidered and withdrawn.

Applicants claim 11 defines a combination, similar to that recited in claim 10, of a plurality of wireless LAN base stations in a plurality of locations and at least one wireless LAN terminal in each of the locations, terminals wireless connected to a plurality of the wireless LAN base stations, at least one of the plurality being in the same location as the terminal and at least one other of the plurality being in a different location.

Applicant respectfully submits that the combination of Moscowitz, Van Horne and knowledge in the art lack this claim 11 combination of wires LAN base stations and wireless LAN terminals for substantially the same reasons Applicant presents above with respect to claim 10.

Applicant's claim 11 further includes, in combination with other elements, a charging server substantially similar to the charging server defined by claim 7.

Applicant respectfully submits that the combination of Moscowitz, Van Horne and knowledge in the art lack the claim 11 charging server for substantially the same reasons Applicant presents above with respect to claim 7.

Applicant respectfully submits that, for at least the foregoing reasons, the combination of Moscowitz, Van Horne and knowledge in the art does not show obviousness of Applicant's claim 11 under 35 U.S.C. § 103(a). Applicant therefore respectfully requests that the rejection be reconsidered and withdrawn.

Referring to Applicant's claim 12, the claim defines a combination, similar to that recited in claim 10 of a plurality of wireless LAN base stations in a plurality of locations and at least one wireless LAN terminal in each of the locations, terminals wireless connected to a plurality of the wireless LAN base stations, at least one of the plurality being in the same location as the terminal and at least one other of the plurality being in a different location.

Applicant respectfully submits that the combination of Moscowitz, Van Horne and knowledge in the art lack this claim 12 combination of wires LAN base stations and wireless LAN terminals for substantially the same reasons Applicant presents above with respect to claim 10.

Applicant's claim 12 further defines the wireless LAN base stations, wireless terminals and gateway arranged similar to the arrangement recited by claim 10 – arranged to measure a communication speed from each of the wireless LAN terminals to the internet through each of the wireless LAN base stations, and to compare the measured speed, and to selectively connect each of wireless terminals to the internet using the wireless LAN base station having the highest measured speed among the plurality of base stations to which it is connected.

Applicant respectfully submits that the combination of Moscowitz, Van Horne and knowledge in the art lack the claim 12 wireless LAN terminals, wireless LAN base stations and getaway, arranged to measure and compare communication speeds from each wireless terminal through different wireless LAN base stations, and selectively connect the wireless terminals through the highest speed of its connected wireless LAN base stations, for

Applicant respectfully submits that, for at least the foregoing reasons, the combination of Moscowitz, Van Horne and knowledge in the art does not show obviousness of Applicant's claim 12 under 35 U.S.C. § 103(a). Applicant therefore respectfully requests that the rejection be reconsidered and withdrawn.

Referring to Applicant's claim 13, the claim defines a combination, similar to that recited in claim 10 of a plurality of wireless LAN base stations in a plurality of locations and at least one wireless LAN terminal in each of the locations, terminals wireless connected to a plurality of the wireless LAN base stations, at least one of the plurality being in the same location as the terminal and at least one other of the plurality being in a different location.

Applicant respectfully submits that the combination of Moscowitz, Van Horne and knowledge in the art lack this claim 13 combination of wires LAN base stations and wireless LAN terminals for substantially the same reasons Applicant presents above with respect to claim 10.

Applicant's claim 13 further defines the wireless LAN base stations, wireless terminals and gateway arranged similar to the arrangement recited by claim 10 – arranged to measure a communication speed from each of the wireless LAN terminals to the internet through each of the wireless LAN base stations, and to compare the measured speed, and to selectively connect each of wireless terminals to the internet using the wireless LAN base station having the highest measured speed among the plurality of base stations to which it is connected.

Applicant respectfully submits that the combination of Moscowitz, Van Horne and knowledge in the art lack the claim 13 wireless LAN terminals, wireless LAN base stations and gateway, arranged to measure and compare communication speeds from each wireless terminal through different wireless LAN base stations, and selectively connect the wireless terminals through the highest speed of its connected wireless LAN base stations, for

substantially the same reasons Applicant presents above with respect to claim 10.

Applicant's claim 13 further includes, in combination with other elements, a charging server substantially similar to the charging server defined by claim 7.

Applicant respectfully submits that the combination of Moscowitz, Van Horne and knowledge in the art lack the claim 13 charging server for substantially the same reasons Applicant presents above with respect to claim 7.
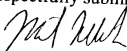
Applicant respectfully submits that, for at least the foregoing reasons, the combination of Moscowitz, Van Horne and knowledge in the art does not show obviousness of Applicant's claim 13 under 35 U.S.C. § 103(a). Applicant therefore respectfully requests that the rejection be reconsidered and withdrawn.

CONCLUSION

Applicant respectfully requests that for the foregoing reasons the application be reconsidered, claims 1, 7 and 9-17 be allowed, and the application be passed to issue. Should the Examiner find the application to be other than in condition for allowance, the Examiner is respectfully requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary.

Please charge any deficiencies in fees and credit any overpayment of fees to Attorney's Deposit Account No. 50-2041.

Respectfully submitted,

Michael E. Whitham
Reg. No. 32,635

Whitham, Curtis, Christofferson and Cook, P.C.
11491 Sunset Hills Road, Suite 340
Reston, VA 20190
Tel. (703) 787-9400
Fax. (703) 787-7557
Customer No.: 30743